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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,423	10/16/2003	Yoshio Sugano	1259-0240P	5846

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EXAMINER	
FINDLEY, CHRISTOPHER G	
ART UNIT	PAPER NUMBER
2621	

NOTIFICATION DATE	DELIVERY MODE
11/29/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/685,423	SUGANO ET AL.	
	Examiner	Art Unit	
	Christopher Findley	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/06/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/06/2007 have been fully considered but they are not persuasive.

2. Re claims 1 and 7, the Applicant argues that neither Lee nor Clapper either alone or in combination teaches or suggests "displaying the index images in a divided display area of the first display device, the first display device changing the number to divide the display area in accordance with the number of the index images extracted from the moving image of the predetermined length" (Applicant's Remarks: page 6, lines 8-12; page 7, lines 13-17; page 8, lines 13-17). However, the Examiner respectfully disagrees. Lee discloses, with respect to Fig. 1, that the video scaler 180 divides the display according to the number of still pictures determined by the control unit 170 (Lee: Fig. 1; paragraph [0021]). Furthermore, Lee discloses that the data is read from a DVD audio disk, and that the information regarding the number of still frames for the video sequence is contained in each track (Lee: paragraph [0025]). Since the tracks are subdivisions of the total disk space, the video segment contained in each track, which is read by the system of Lee, is inherently predetermined in length.

3. Re claims 1 and 7, the Applicant also argues that neither Lee nor Clapper either alone or in combination teaches or suggests "a controller to start reproduction of the moving image from the scene corresponding to a selected index image" (Applicant's Remarks: page 6, lines 22-24; page 7, lines 27-29; page 8, lines 13-19). However, the Examiner respectfully disagrees. Lee discloses that if a highlighted still picture is

selected, the still picture is restored to its normal resolution (Lee: paragraph [0023]). Lee does not specifically disclose that video sequence playback commences when a still picture of the divided display is selected. However, Clapper discloses a system for facilitating access to digital video, wherein a video sequence is divided into regular intervals, and each interval is represented on a divided display by a still image. Since both Lee and Clapper relate to dividing a display into still images, by detecting still image information from an input image sequence, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the optical disk reproducing system of Lee with the digital video index of Clapper to create a system capable of allowing a user to select a video sequence from a divided display index at a user controlled entry point, thereby providing a way to manipulate digital video data stored on a digital storage medium (Clapper: column 1, lines 26-27).

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Lee and Clapper relate to dividing a display into still images, by detecting still image information from an input image sequence. Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the optical disk reproducing

system of Lee with the digital video index of Clapper to create a system capable of allowing a user to select a video sequence from a divided display index at a user controlled entry point, thereby providing a way to manipulate digital video data stored on a digital storage medium (Clapper: column 1, lines 26-27).

5. In view of the above rebuttals to the Applicant's arguments, the Examiner maintains the previous rejection of claims 1 and 7 under Lee (US 20030049022 A1) in view of Clapper (US 6925602 B1). The previous rejections of claims 2-6 and 8-11 are also maintained. A modified copy of the previous office action, reflecting changes made to the previously presented claims and also the new claims 12-15 added via the Amendment filed 9/06/2007, is included below.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-3, 5, 7-9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 20030049022 A1) in view of Clapper (US 6925602 B1).

Re **claim 1**, Lee discloses an apparatus for reproducing a moving image of a predetermined length having a plurality of frame images (Lee: paragraph [0007]), the apparatus comprising: a moving image processing device for extracting the frame

images as index images from the moving image (Lee: paragraph [0019]); a first display device for displaying the index images in a divided display area (Lee: paragraph [0007]), the first display device changing the number to divide the display area by in accordance with the number of the index images (Lee: paragraphs [0020]-[0021]) extracted from the moving image of the predetermined length (Lee: paragraph [0025], since the tracks are subdivisions of the total disk space, the video segment contained in each track, which is read by the system of Lee, is inherently predetermined in length); and a controller to start reproduction of the moving image from the scene corresponding to a selected index image (Lee: paragraph [0023]; Fig. 1, the second DAC unit 182 outputs video). Lee does not specifically disclose extracting reference images at regular intervals. However, Clapper discloses that the reference frames (thumbnail frames) are taken at regular intervals (column 1, lines 58-60). Since both Lee and Clapper relate to extracting and displaying reference images from a video sequence on a partitioned display screen, one of ordinary skill in the art at the time of the invention would have found it obvious to combine their teachings in order to provide the user with the ability to manipulate the video data in more ways than the standard zoom, slow motion, etc (Clapper: column 1, lines 15-27). The combined system of Lee and Clapper has all of the features of claim 1.

Re **claim 2**, the combined system of Lee and Clapper discloses that the first display device displaying all index images at the same time (Lee: paragraph [0007]), as in the claim.

Re **claim 3**, the combined system of Lee and Clapper discloses a majority of the features of claim 2, as discussed above in claim 1. Lee does not specifically disclose that the moving image processing device changes the interval to extract the frame images in accordance with the number of the index images. However, Clapper discloses that the interval between still images in the divided display and the number of images in the divided display may both be adjusted (Clapper: Fig. 1; column 2, lines 41-48). Since both Lee and Clapper relate to dividing a display into still images, by detecting still image information from an input image sequence, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the optical disk reproducing system of Lee with the digital video index of Clapper to create a system capable of allowing a user to select a video sequence from a divided display index at a user controlled entry point, thereby providing a way to manipulate digital video data stored on a digital storage medium (Clapper: column 1, lines 26-27). The combined system of Lee and Clapper has all of the features of claim 3.

Re **claim 5**, the combined system of Lee and Clapper discloses a second display device to display the moving image (Lee: paragraph [0007]), as in the claim.

Claim 7 recites the corresponding method implemented by the apparatus of claim 1, and therefore has been analyzed and rejected with respect to claim 1 above.

Claim 8 has been analyzed and rejected with respect to claim 2 above.

Claim 9 has been analyzed and rejected with respect to claim 3 above.

Claim 11 has been analyzed and rejected with respect to claim 5 above.

Re **claim 12**, the combined system of Lee and Clapper discloses a majority of the features of claim 12, as discussed above in claim 1, and additionally Lee discloses that the display is divided in accordance with a maximum number of index images (Lee: paragraph [0023], if the number of still pictures is too large to be output in a display, the still pictures are divided into a plurality of groups to prevent the resolution of the still pictures from being decreased). Lee does not specifically disclose that the moving image processing device changes the interval to extract the frame images. However, Clapper discloses changing the time interval of the index images (Clapper: Fig. 1; column 2, lines 41-48). Since both Lee and Clapper relate to dividing a display into still images, by detecting still image information from an input image sequence, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the optical disk reproducing system of Lee with the digital video index of Clapper to create a system capable of allowing a user to select a video sequence from a divided display index at a user controlled entry point, thereby providing a way to manipulate digital video data stored on a digital storage medium (Clapper: column 1, lines 26-27). The combined system of Lee and Clapper has all of the features of claim 12.

Claim 13 has been analyzed and rejected with respect to claim 12 above.

Re **claim 14**, the combined system of Lee and Clapper discloses a majority of the features of claim 14, as discussed above in claim 1, and additionally Lee discloses

that the plurality of frame images are captured over a predetermined time period (Lee: paragraph [0025], since the tracks are subdivisions of the total disk space, the video segment contained in each track, which is read by the system of Lee, is inherently predetermined in length). Lee does not specifically disclose that the plurality of frame images are captured at regular intervals. However, Clapper discloses that the images are extracted at regular intervals (Clapper: column 1, lines 58-60). Since both Lee and Clapper relate to dividing a display into still images, by detecting still image information from an input image sequence, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the optical disk reproducing system of Lee with the digital video index of Clapper to create a system capable of allowing a user to select a video sequence from a divided display index at a user controlled entry point, thereby providing a way to manipulate digital video data stored on a digital storage medium (Clapper: column 1, lines 26-27). The combined system of Lee and Clapper has all of the features of claim 14.

Claim 15 has been analyzed and rejected with respect to claim 14 above.

8. Claims 4, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 20030049022 A1) and Clapper (US 6925602 B1) as applied to claims 1-3, 5, 7-9, and 11-15 above, and further in view of Shiiyama (US 20030026594 A1).

Re **claim 4**, the apparatus of Lee, now implemented within the system of Clapper, discloses a majority of the features of claim 4 as discussed above concerning claim 1, but does not specifically state that the first display device displays the index images and the moving image at the same time. However, Shiiyama discloses an image search apparatus, wherein a scene is played back on the screen while reference (thumbnail) images are also displayed simultaneously (Shiiyama: Fig. 3). Since Lee, Clapper, and Shiiyama all relate to displaying reference images from a video sequence on a partitioned display screen for a user to select a playback sequence, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the image search feature of Shiiyama with the combined index system of Lee and Clapper in order to address lack of synchronization (scrolling through reference/thumbnail images) (Shiiyama: paragraph [0008]) by displaying all reference/thumbnail on the screen and adjusting size/proportions accordingly (Lee: paragraph [0007]). The combined system of Lee, Clapper, and Shiiyama, has all of the features of claim 4.

Re **claim 6**, the combined system of Lee and Clapper discloses a majority of the features of claim 6, as discussed above in claim 1, but neither Lee nor Clapper specifically discloses a photography device to take a subject image continuously to obtain the moving image. However, Shiiyama discloses an image search apparatus, wherein the system includes a moving image recorder/player device (Shiiyama: Fig. 1, moving image recorder/player 110; paragraph [0045]). Since Lee, Clapper, and Shiiyama all relate to displaying reference images from a video sequence on a partitioned display screen for a user to select a playback sequence, one of ordinary skill

in the art at the time of the invention would have found it obvious to combine the image recorder/system bus interface of Shiiyama with the combined index system of Lee and Clapper in order to address lack of synchronization (scrolling through reference/thumbnail images) (Shiiyama: paragraph [0008]) by displaying all reference/thumbnail on the screen and adjusting size/proportions accordingly (Lee: paragraph [0007]). The combined system of Lee, Clapper, and Shiiyama, has all of the features of claim 6.

Claim 10 has been analyzed and rejected with respect to claim 4 above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Video viewing assisting method and a video playback system therefor
Nagasaka et al. (US 5818439 A)

b. Reviewing and navigating among images on an image capture unit using a thumbnail position memory bar
Anderson et al. (US 6700612 B1)

c. Picture search device and recording medium readable for the same
Borden et al. (US 6268854 B1)

d. Non-linear reproduction control method of multimedia stream and apparatus thereof
Jun et al. (US 20010053277 A1)

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Findley whose telephone number is (571) 270-1199. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Findley/

Marsha D Banks-Harold

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